

Optimization of the Use of Social Media to Support the Paperless Office

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Abstract. The use of paper in the Office, especially in University Ahmad Dahlan (UAD) still dominates the resource requirements should be held each period features. The use of paper will result in long-term effect to global warming. Therefore the effort toward a paperless is one solution to reducing the use of paper and reach the Green Earth (go green). The optimization step effort to go paperless needs to be done, including in the UAD may be done in various ways, one of them with the use of social media applications optimization in academic activities. The results of an analysis give an idea that almost all academic activity that involves the use of paper can be replaced with the utilization of social media applications that are most widely used in the community are concerned, in this paper are a group of students and employees of the group.

Keywords: *academic process, global warning, go green, optimization, paperless, social media*

1 Introduction

Paper for Office space remains the main needs in the running of his administration. Especially in Indonesia and does not cover the possibility of Ahmad Dahlan University (UAD). The need for administrative activities in the paper environment UAD still tend to high. As the author says in the papers in ICGBT-2012 [1] that the use of paper in the environment is still relatively high in UAD.

Paper usage will result in an lot of effects, especially will be increasingly depleted supplies of wood used as a raw material for the manufacture of paper. Wood derived from trees in the Woods logging both legal and illegal. If the paper needs increases the cutting of trees will increase anyway. With the growing number of trees that are cut down (let alone are not offset by replanting) then the oxygen supply would result in the Earth becoming increasingly thin. More than that other effects will arise, such as global warming, floods, landslides, etc.

A variety of efforts to reduce the risk of the above mentioned among other things with the paperless engineering. UAD has sought to make paperless strategies, inter alia by implementing SMS Broadcast system to spread invitations and official notification of work units to the civitas Academica UAD. In addition, some work units have also been utilizing internet applications to replace paper. Internet applications that have been used include the use of email for delivery and receipt of the invitation, use of digital files (PDF) as a written document to the academic and administrative reference the civitas, notulensi uses the file document, etc.

Optimization of the use of the media to support the paperless needs to be done, so as to obtain maximum results. This paper will convey the idea and initial analysis to maximize the use of one of the alternatives to reach the paperless office. This

paper discusses the optimization of the use of social media as an alternative to support the paperless office.

Refer to understanding social media [2]: Andreas Kaplan and Michael Haenlein define social media as "a group of internet-based applications that are built on the basis of ideology and Web 2.0 technology, and allows the creation and exchange of user-generated content". Broader understanding of the sense of Social Media is an online media, with its users could easily participate, share, and create content including blogs, social networking, wikis, forums and a virtual world. Blog, wiki and social networking is a form of social media is the most commonly used by people around the world. Other accounts say that social media is an online media that supports social interaction and social media using web-based technology that transforms communication became interactive dialogue.

2 Method

Analysis of the early stages of the survey results will be presented to the group the use of some type of internet-based social media among students and employees who work in each of the work units each. Next up will be examined application features social media that support Office process that involves communication and alternative replacement for paper. Analysis of the advantage obtained if the use of social media can replace the paper as a whole.

3 Analysis Result

3.1 Survey of student

A detailed questionnaire was carried out against all respondents in each sampling class. There are four classes as respondents in this survey. Each class has a background IT mastery. Distribution of respondents to each successive class is 59, 66, 49, and 63. Each of the respondents fill in a detailed questionnaire with questions on ownership of social media internet-based facilities. Social media applications that are rumored to be in the questionnaire are: forums, email, facebook, twitter, linkedIn, g +, and more. Of the four classes of applications that most devotees is the email service (100%), next is the facebook (96%), followed by twitter (75%), and the rest according to the data presented in the following table.

Table 1. Distribution of use of internet-based social media applications on a group of college students

Group	Forum	email	facebook	twitter	Linkedln	g+	Other
1 (59)	59%	100%	100%	85%	25%	53%	39%
2 (66)	65%	100%	100%	86%	38%	61%	32%
3 (49)	20%	100%	82%	35%	18%	47%	10%
4 (63)	100%	100%	100%	86%	19%	71%	48%
Avg/ App	64%	100%	96%	75%	26%	59%	33%
Avg	14%	22%	21%	17%	6%	13%	7%

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From the table 1 can be visualized in the form of application usage distribution chart (fig. 1) as follows

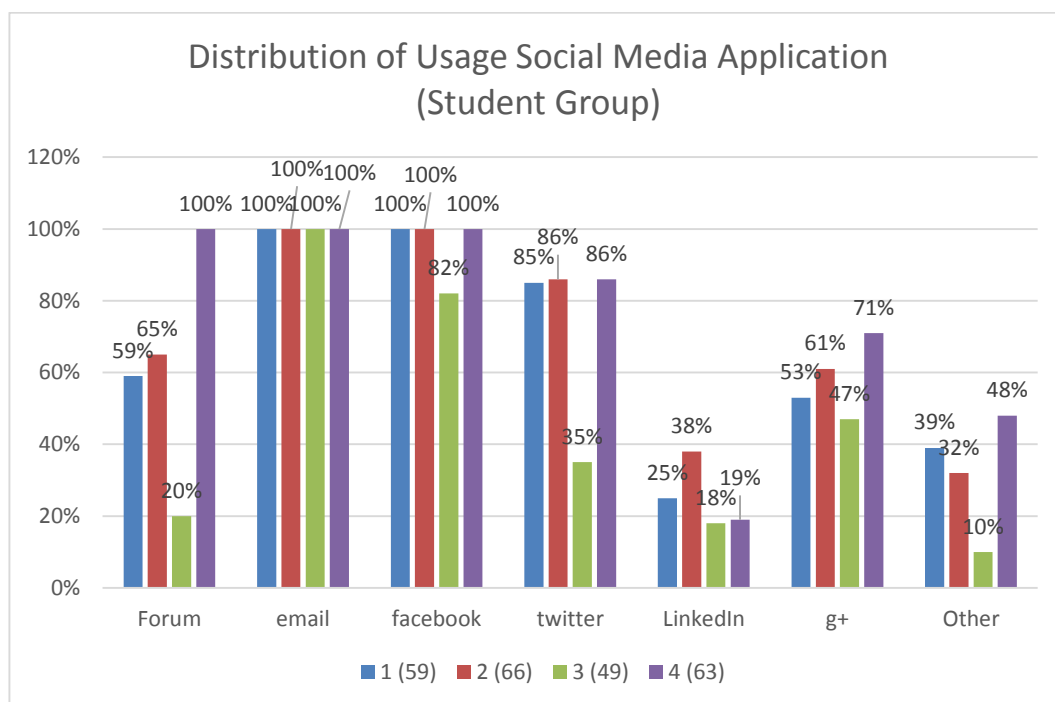


Figure 1 Distribution of Usage Social Media Application (Students Group)

Based on table 1, the use of social media applications on a group of students in General (four groups) can be ranked from largest to smallest in the following email (22%), facebook (21%), twitter (17%), forums (14%), g + (13%), others (7%), and linkedIn (7%). Visually it can be shown in the chart below (fig. 2).

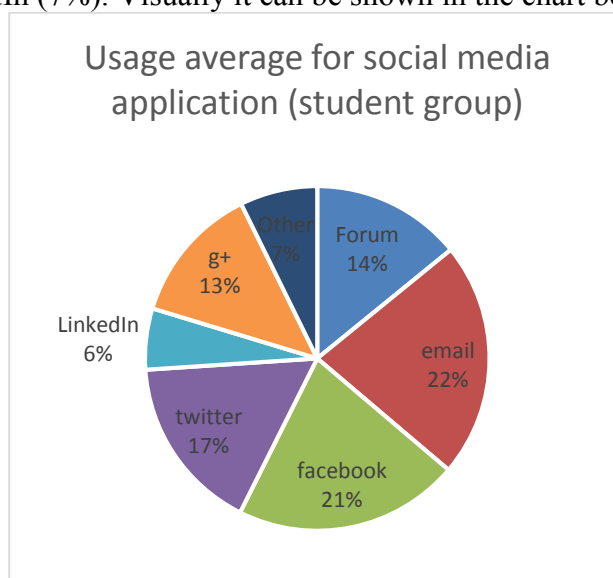


Figure 2 Usage average for social meia application (student group)

3.2 Survey of Work Unit

Social media application usage Data for a group of employees and a lecturer at the work unit are based on the most detailed questionnaire and the data in the HR system. Logging is done by grouping it into six (6) units of work groups, i.e. faculty staff, departement (lecturers and employees), agencies, Bureau, Center, and more. The number of respondents each work unit is 80, 800, 25, 60, 15, and 35 people. Each of the respondents recorded regarding the use and ownership of social media applications such as accounts that are performed on a group of students. The logging results obtained that most social media applications a lot of interest/use is email, followed by a forum and the third position is linkedIn.

Table 2. Distribution of use of internet-based social media applications on the group work units

Group	Forum	email	facebook	twitter	LinkedIn	g+	Other
1 (80)	56%	94%	19%	13%	13%	59%	71%
2 (800)	69%	94%	56%	56%	68%	44%	29%
3 (25)	80%	80%	56%	52%	20%	76%	48%
4 (60)	92%	100%	38%	77%	20%	25%	72%
5 (15)	87%	93%	67%	67%	60%	20%	67%
6 (35)	71%	86%	57%	66%	66%	54%	46%
Avg/ app	65%	86%	51%	53%	58%	40%	31%
Avg	17%	22%	13%	14%	15%	11%	8%

From the table 2 can be visualized in the form of application usage distribution chart is as follows.

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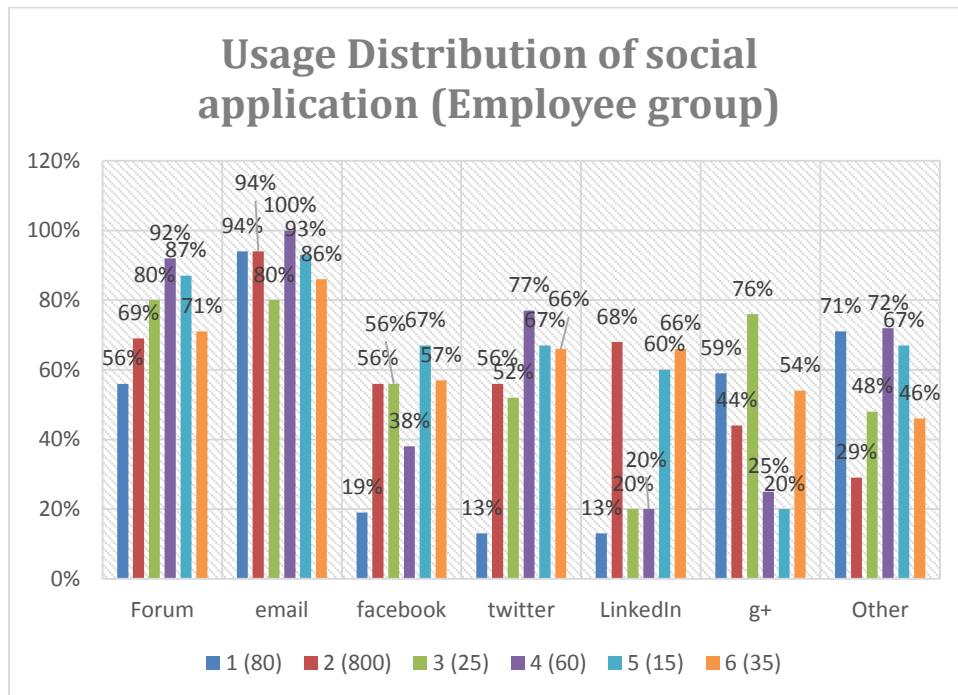


Figure 3 Usage distribution of social application (employee group)

Based on table 2, the use of social media applications on a group of employees in General (six groups) can be ranked from largest to smallest in the following email (22%), forums (17%), linkedIn (15%), twitter (14%), other (8%), and linkedIn (26%). Visually it can be shown in the chart below (fig. 3).

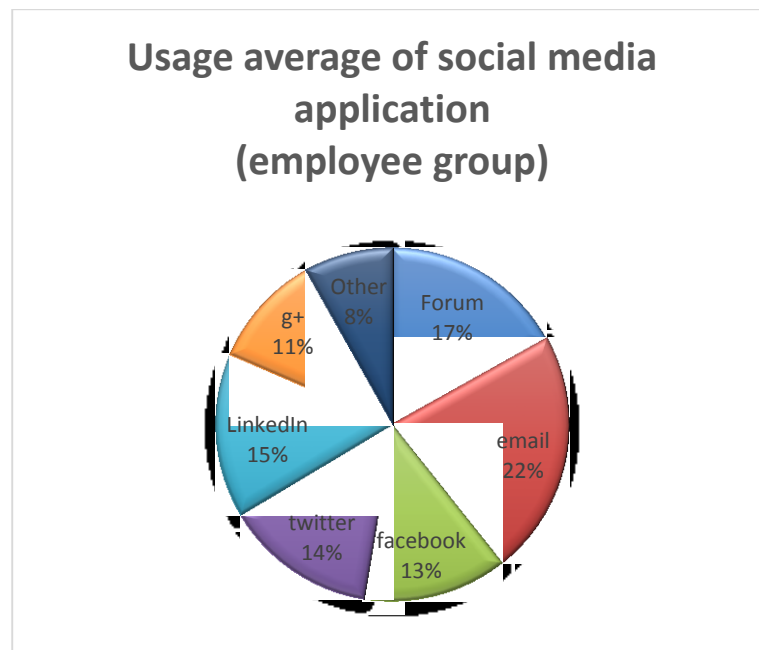


Figure 4 Usage average of social application (employee group)

3.3 Survey of combination (student and employee)

The survey results on a group of students and employees are combined and get the level of logging for the use of social media applications. The most used application is the next facebook, email, and the third position is the forum and twitter, complete application usage data are described in table 3. Table 3. Usage average of social media application (combination)

Table 3. Survey of combination

Group	Forum	email	facebook	twitter	LinkedIn	g+	lainnya
Student	14%	22%	21%	17%	6%	13%	14%
Employee	17%	22%	13%	14%	15%	10%	8%
rerata/ app	16%	22%	17%	16%	11%	12%	11%
rerata	15%	21%	17%	15%	10%	11%	11%

Based on table 3, the use of social media applications on a group of employees and student in General (six groups) can be ranked from largest to smallest in the following email (21%), facebook (17%), forums (15%), twitter (15%), g+ (11%), other (11%), and linkedIn (10%). Visually it can be shown in the chart below (fig. 5).

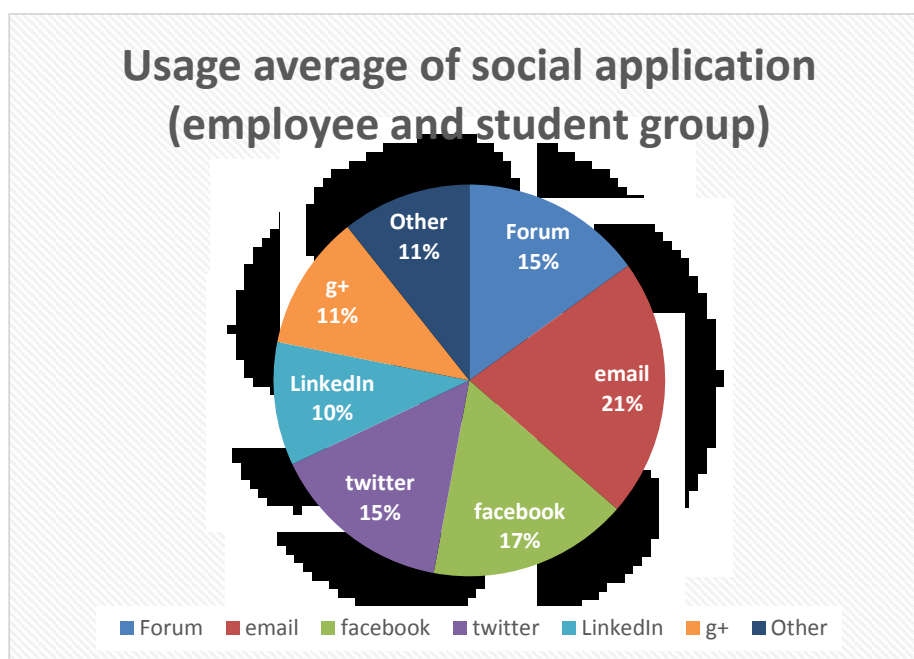


Figure 5 Usage average of social application (employee and student group)

3.4 Capability of social media application to support academic process

Paperless office in academics include many activities that involve the use of paper, e.g. in the Office Administration and related activities student activities. Here are some logging activity that involves the use of paper and alternative uses of social media applications in support of academic activities.

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Table 4. Capability of Social Media Application to support academic process

Capability	Forum	email	facebook	twitter	LinkedIn	g+
Discuss	3	3	3	3	3	3
Private Message	3	3	3	3	3	3
Thread history	3	2	3	3	3	3
Storage document	3	2	2	1	3	3
View document	3	2	2	2	2	2
Grouping	3	2	3	1	3	3
SMS access	1	1	3	3	1	0

0 = not capability; 1 = low; 2 = average; 3 = high

4 Optimization Step

The activity of the office in the faculty and administrative unit includes the study of document management, academic documents, schedule meetings, notulent printing, printing documents, and teaching others. Activities that involve students in the use of paper, among others, the printing schedule, making the report subjects, making the task of writing theses, lecture, textbook documents, lecture notes, and others.

Almost all academic activities (except for the documents such as diplomas and transcripts printing final value, as well as the decision letter) can be replaced with digital files and communication between communities using social media applications.

In the activity in the distribution of invitations, notifications, scheduling, and others can use social media applications that are most used are supported by email forum (webbased) so well-documented and can be accessed at any time.

In a learning activity can use this email as a communication medium and working in close collaboration with a discussion forum and or group/ mailing list. The mailing list can be used as a medium of information and discussion as well as notification to the students in the group in each of the courses. For routine activities in the learning tasks, such as gathering workmanship quizzes, distributing learning materials can use the elearning facilities at UAD has provided.

The important things are needed in order to achieve the optimal use of the paperless office is a policy and leadership and mentoring from a clear policy within an organization. Need to be given special incentives and motivation for the civitas involved.

5 Conclusions

1. The use of social media applications it's possible to replace the use of paper
2. The use of social media applications will greatly assist resource-saving at the University
3. The use of social media applications on a group of students and employees are familiar, almost daily have been used.

6 References

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